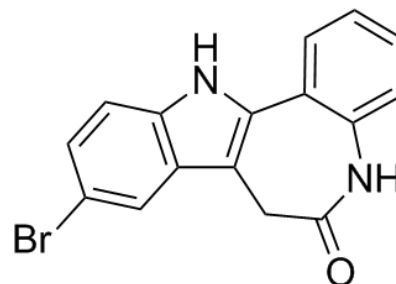


**Product Name** : Kenpaullone  
**Cat. No.** : PC-42965  
**CAS No.** : 142273-20-9  
**Molecular Formula** : C<sub>16</sub>H<sub>11</sub>BrN<sub>2</sub>O  
**Molecular Weight** : 327.1754  
**Target** : Cyclin-dependent Kinase (CDK)  
**Solubility** : DMSO: ≥ 35 mg/mL



## Biological Activity

Kenpaullone (9-Bromopaullone, NSC-664704) is a potent inhibitor of CDK1/cyclin B with IC<sub>50</sub> of 0.4 μM, also inhibited CDK2/cyclin A (IC<sub>50</sub>=0.68 μM), CDK2/cyclin E (IC<sub>50</sub>=7.5 μM) and CDK5/p25 (IC<sub>50</sub>=0.85 μM); shows less effect on other kinases, only c-Src, CK2, ERK1/2 (IC<sub>50</sub>=15-20 μM) with IC<sub>50</sub>s less than 30 μM; displays delayed cell cycle progression in treated cells; also is a potent inhibitor of GSK-3β (IC<sub>50</sub>=23 nM), activates Nanog expression in mouse fibroblasts transduced with a subset of reprogramming factors lacking Klf4, can replace Klf4 in the reprogramming of primary and secondary fibroblasts and NPCs.

## References

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Bain J, et al. *Biochem J.* 2003 Apr 1;371(Pt 1):199-204.  
Lyssiotis CA, et al. *Proc Natl Acad Sci U S A.* 2009 Jun 2;106(22):8912-7.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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